AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions, and listings, of Claims in the Application.

Listing of Claims:

Claim 1 (Original): A video encoder adapted to compress video information in a robust coded bitstream comprising:

a definition module adapted to receive video frames and to parse the video frames into video objects; and

a video object plane (VOP) encoders adapted to generate intra-coded VOPs (I-VOPs) and predictive-coded VOPs (P-VOPs) that correspond to the video objects, where a VOP encoder from the VOP encoders is configured to generate a predictive-coded VOP (P-VOP) from the video frame, where the VOP encoder is configured to generate a standard motion vector for the video object of the present frame, where the standard motion vector references motion to a portion of a frame that is immediately prior to the present frame, where the VOP encoder is configured to generate a redundant motion vector that is independent of the standard motion vector for the video object of the present frame, where the redundant motion vector references motion to a portion of a frame that is prior to the frame referenced by the standard motion vector, where the VOP encoder

embeds the redundant motion vector in a data packet, where an output of the VOP encoder is related to the robust coded bitstream.

Claim 2 (Original): The video encoder as defined in claim 1, wherein the VOP encoder embeds the redundant motion vector in the data packet such that the bitstream is compliant with existing syntax.

Claim 3 (Original): The video encoder as defined in claim 1, wherein the data packet is a user data video packet.

Claim 4 (Original): The video encoder as defined in claim 1, further comprises a multiplexer adapted to combine outputs of multiple VOP encoders to generate the robust coded bitstream.

Claim 5 (Original): The video encoder as defined in claim 1, wherein the video encoder is further configured to detect a scene change in the received frames and to encode the scene change with two consecutive Intra-coded Frames (I-Frames), where the I-Frames include only I-VOPs and not P-VOPs.

Claim 6 (Original): The video encoder as defined in claim 1, wherein the video encoder is configured to generate robust coded bitstream that is compliant with MPEG-4 syntax.

Claim 7 (Original): The video encoder as defined in claim 1, wherein the VOP encoder frame references motion for the redundant motion vector from an encoded frame that is immediately prior to the previous frame.

Claim 8 (Original): The video encoder as defined in claim 1, wherein the multiplexer is configured to store the redundant motion vector in a user data video packet of an MPEG-4 video bitstream.

Claims 9 - 11 (Withdrawn).

Claims 12 - 21 (Canceled).

Claim 22 (Currently amended): A video bitstream that carries a plurality of video frames including intra-coded frames (I-frames) and predictive-coded frames (P-frames), the video bitstream comprising:

a plurality of first packets that carry video object planes (VOPs), where the plurality of first packets include packets for intra-coded VOPs (I-VOPs) and packets for predictive-coded VOPs (P-VOPs); and

a plurality of second packets, where a second packet carries at least one redundant motion vector corresponding to a P-VOP in the video bitstream, the redundant motion vector coded from a second reference frame removed from a first reference frame from which a standard motion vector is coded, the second packet including an indication of the second reference frame.

Claim 23 (Original): The video bitstream as defined in claim 22, where the plurality of second packets comprises user data video packets, where a user data video packet carries the redundant motion vector such that the video bitstream is compliant with MPEG-4 syntax.

Claim 24 (Original): The video bitstream as defined in claim 23, wherein the user data video packet follows the first packet for a corresponding P-VOP in the video bitstream.

Claim 25 (Currently amended): The video bitstream as defined in claim 23, wherein the user data video packet further ~~carriers an~~ carries the indication of ~~which~~ the second reference frame ~~to use as a reference frame for the corresponding redundant motion vector~~.

Claim 26 (Original): The video bitstream as defined in claim 23, wherein the user data video packet further comprises at least one user data header code that identifies data within the user data video packet.

Claim 27 (Original): The video bitstream as defined in claim 23, wherein the user data header code is 16-bits long.

Claim 28 (Original): The video bitstream as defined in claim 23, wherein the user data video packet includes a header extension code.

Claims 29 - 34 (Withdrawn).

Claim 35 (New): A video bitstream that carries a plurality of video frames including intra-coded frames (I-frames) and predictive-coded frames (P-frames), the video bitstream comprising:

a plurality of first packets that carry video object planes (VOPs), where the plurality of packets include packets for intra-coded VOPs (I-VOPs) and packets for predictive-coded VOPs (P-VOPs); and

a plurality of second packets comprising user data video packets, where a user data video packet carries at least one redundant motion vector corresponding to a P-VOP in the video bitstream such that the video bitstream is compliant with MPEG-4 syntax, the user data video packet further carries an indication of which frame to use as a reference frame for the corresponding redundant motion vector.